



## Topical Formulation with *Cordia verbenacea* Essential Oil and Glycolic Acid

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**SUMMARY.** This study evaluated the effect of *Cordia verbenacea* essential oil (CV) and glycolic acid 70 % (GA), isolated and associated, on Wistar rats back skin. A base gel was added to 2 % of CV and/or 10 % of GA, thus forming 4 formulations: 1) GA + CV, 2) CV, 3) GA, and 4) gel base. All formulation had their final pH adjusted to 3,5 and were applied once daily, for 15 consecutive days, on 4 areas with 1 cm<sup>2</sup>, while another area without application (control). Statistical analysis of biopsies showed no difference in epidermis thickness and stratum corneum. Among fibroblast counts there was a statistical significance for groups exposed to the GA and to the association. Only in the group exposed to GAT there was significant difference in leukocytes number. The association of GA with CV proved favorable because it increased fibroblast counts without increasing leukocyte numbers, meaning inflammatory reaction may be reduced.

**KEY WORDS:** *Cordia Verbenacea*, Epidermis, Fibroblasts, Glycolic acid, Leukocytes.

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